# **CERTIFICATE OF ELECTRONIC FILING**

I hereby certify that this correspondence is being transmitted on the date shown below via the United States Patent and Trademark Office electronic filing system in accordance with 37 CFR 1.6(a)(4).

April 14, 2008

XuFan Tseng Date

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants : Lewis Michael Popplewell *et al.* 

Serial No. : 10/693,527

Filed : October 24, 2003

Art Unit : 1618 Confirmation No. : 2313

Examiner : James William Rogers

Title : CELLULOSE-BASED PARTICLES OR LIQUIDS AND

METHODS FOR THEIR PREPARATION AND USE

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# APPEAL BRIEF UNDER 37 CFR § 41.37

# Dear Sir/Madam:

This Appeal Brief is submitted in support of the appeal from the Primary Examiner's November 14, 2007 final rejection of claims 26, 27, and 29-34 in the above-identified application. Applicants submit this Appeal Brief in furtherance of the Notice of Appeal filed February 14, 2008 under CFR § 41.31. The Commissioner is authorized to charge any required fees and any additional fees, or credit any overpayment to the Deposit Account No. 12-1295 in connection with this matter.

#### (I) REAL PARTY IN INTEREST

The real party in interest is International Flavors & Fragrances Inc., the assignee of the above-identified application.

## (II) RELATED APPEALS AND INTERFERENCES

Appellants believe there are no related appeals or interferences that will directly affect or will be directly affected by the Board's decision in the present appeal.

#### (III) STATUS OF CLAIMS

The application as filed contained claims 1-24.

In the December 7, 2006 Amendment, claims 1-17 and 19-24 were canceled and claim 25 was added.

In the July 2, 2007 Amendment, claims 18 and 25 were canceled and claims 26-29 were added.

In the October 12, 2007 Amendment, claim 28 was canceled and claims 30-34 were added.

All of the pending claims (i.e., claims 26, 27, and 29-34) have been rejected and are the subject of this appeal.

## (IV) STATUS OF AMENDMENTS

No amendments have been filed subsequent to the November 14, 2007 Final Office Action.

# (V) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a continuous liquid flavor or fragrance system that comprises a flavor or fragrance material and a cellulose polymer. Incorporation of the recited cellulose polymer at the recited level provides release characteristics desired for the flavor/fragrance delivery.

Independent claim 26 recites a continuous liquid flavor or fragrance system comprising a flavor or fragrance material and a cellulose polymer, the cellulose polymer

is hydroxypropyl cellulose or ethyl cellulose.<sup>1</sup> Dependent claims 30-32 depend directly from claim 26, and contain further limitations to claim 26.<sup>2</sup>

Independent claims 27 and 33 recite a continuous liquid flavor system comprising a flavor material, an emulsifier, and a cellulose polymer, and the cellulose polymer is hydroxypropyl cellulose or ethyl cellulose.<sup>3</sup> Dependent claims 29 and 34 depend directly from claims 27 and 33, respectively, and contain further limitations.<sup>4</sup>

#### (VI) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 26, 27, and 29-34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,096,699 to Bergemann *et al.* (hereinafter "Bergemann").

## (VII) ARGUMENT

Claims 26, 27, and 29-34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bergemann. For the reasons set forth below, Appellants respectfully traverse the rejection of claims 26, 27, and 29-34.

To establish a *prima facie* case of obviousness, the "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, (Fed. Cir. 1983).

Here, Bergemann teaches a solvent containing zero to about 10 weight percent of a thickener, i.e., the thickener serves as a non-essential ingredient in the Bergemann composition (*See*, Bergemann, col. 2, lines 17 and 39; col. 3, lines 45 and 66). Bergemann also discloses methylcellulose and hydroxypropyl methyl cellulose as

<sup>&</sup>lt;sup>1</sup> Specification at page 3, lines 2-6; page 13, lines 10-16

<sup>&</sup>lt;sup>2</sup> Specification at page 13, lines 12 -16

<sup>&</sup>lt;sup>3</sup> Specification at page 3, lines 2-6; page 13, lines 17-24

<sup>&</sup>lt;sup>4</sup> Specification at page 8, lines 17-19

suitable thickeners, and further specifies water soluble methylcellulose as a preferred embodiment (*See*, Bergemann, col. 5, lines 35-42).

In contrast, the claimed invention is directed to a continuous liquid flavor or fragrance system comprising essential ingredients of a flavor or fragrance material and a cellulose polymer. More importantly, the claimed invention requires the cellulose polymer be soluble in organic solvents.<sup>5</sup> In particular, water soluble methylcellulose and hydroxypropyl methyl cellulose, while disclosed as suitable, even preferable, thickeners in Bergemann, are taught explicitly in the claimed invention as non-functional.<sup>6</sup> Thus, the claimed invention has clearly demonstrated the criticality of the cellulose polymers. Bergemann would not lead one skilled in the art to essentially include a cellulose polymer in the composition, let alone to recognize the criticality of the types of cellulose polymers to be included.

As stated in MPEP 2144.05 III, "Applicants can rebut a *prima facie* case of obviousness based on overlapping ranges by showing the criticality of the claimed range. 'The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. . . . In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range.' *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)."

As such, Appellants respectfully submit that Appellants have shown the particular cellulose polymers recited in the claimed invention (i.e., hydroxypropyl cellulose and ethyl cellulose) are critical, and achieve unexpected results relative to the prior art disclosure in its entirety.

<sup>&</sup>lt;sup>5</sup> Specification, page 6, lines 1-11

<sup>&</sup>lt;sup>6</sup> Specification, page 6, lines 15-19

Appeal Brief U.S Serial No. 10/693,527

Date: April 14, 2008

# Conclusion

For the reasons set forth above, Appellants respectfully submit that claims 26, 27, and 29-34 are patentable in view of the cited reference. Appellants respectfully request the Board of Patent Appeals and Interferences to reverse all of the Examiner's rejections as to all of the claims.

Respectfully submitted,

XuFan Tseng (Reg. No. 55,688)

International Flavors & Fragrances Inc.

521 West 57th Street

Law Department – 10th Floor

Previously presented York, NY 10019

Telephone: (212) 708-7163 / (732) 335-2066

#### (VIII) CLAIMS APPENDIX

## 1-25. (Canceled)

- 26. (Previously presented) A continuous liquid flavor or fragrance system comprising from about 80 to about 99.5 weight percent a flavor or fragrance material and from about 0.5 to about 20 weight percent a cellulose polymer, wherein the cellulose polymer is selected from the group consisting of hydroxypropyl cellulose and ethyl cellulose, with the proviso that the continuous liquid flavor or fragrance system is not a liquid crystalline.
- 27. (Previously presented) A continuous liquid flavor system comprising:

  from about 70 to about 97 weight percent a flavor material;

  from about 2 to about 30 weight percent an emulsifier; and

  from about 0.5 to about 10 weight percent a cellulose

wherein the cellulose polymer is selected from the group consisting of hydroxypropyl cellulose and ethyl cellulose, with the proviso that the continuous liquid flavor system is not a liquid crystalline.

### 28. (Canceled)

polymer,

- 29. (Previously presented) The continuous liquid flavor system of claim 27, wherein the emulsifier is selected from the group consisting of mono or di-glycerol ester of fatty acid, polyglycerol ester, and sorbitol ester.
- 30. (Previously presented) The continuous liquid flavor or fragrance system of claim 26 comprising from about 85 to about 95 weight percent the flavor or fragrance material.
- 31. (Previously presented) The continuous liquid flavor or fragrance system of claim 26 comprising from about 5 to about 15 weight percent the cellulose polymer.

Appeal Brief U.S Serial No. 10/693,527

- 32. (Previously presented) The continuous liquid flavor or fragrance system of claim 26 comprising from 3 to 8 weight percent the cellulose polymer.
- 33. (Previously presented) A continuous liquid flavor system comprising:

  from about 78 to about 92 weight percent a flavor material;

  from about 5 to about 20 weight percent an emulsifier; and

  from about 2 to about 8 weight percent a cellulose polymer,

  wherein the cellulose polymer is selected from the group

  consisting of hydroxypropyl cellulose and ethyl cellulose, with the proviso that the

  continuous liquid flavor system is not a liquid crystalline.
- 34. (Previously presented) The continuous liquid flavor system of claim 33, wherein the emulsifier is selected from the group consisting of mono or di-glycerol ester of fatty acid, polyglycerol ester, and sorbitol ester.

# (IX) EVIDENCE APPENDIX

None

# (X) RELATED PROCEEDINGS APPENDIX

None